

## REMARKS

This application has been reviewed in light of the Office Action dated December 22, 2004. In view of the foregoing amendments and the following remarks, favorable reconsideration and withdrawal of the rejections set forth in the Office Action are respectfully requested.

Claims 1-11 are pending. Claims 6-10 have been withdrawn from consideration as directed to a non-elected invention. Claims 1, 4, 5 and 11 have been amended. Support for the claim changes can be found in the original disclosure, and therefore no new matter has been added. Claims 1, 5, 6, 8, 10 and 11 are in independent form.

In the Response to Restriction and Election of Species Requirement filed on October, 22, 2004, Applicants set forth arguments to the effect that Claim 1, 5 and 11 are generic to all the species. Applicants respectfully request consideration of those arguments and acknowledgment that Claim 1, 5 and 11 are generic to all the species.

Claims 1-4 and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,060,735 (*Izuha et al.*). Claims 1, 5 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,824,898 (*Suzuki et al.*) in view of U.S. Patent No. 6,398,349 (*Murai*). Applicants respectfully traverse these rejections.

Independent Claim 1 recites, *inter alia*, that an interface between a lower electrode and/or an upper electrode and a piezoelectric film does not exist. This feature of the invention as set forth in Claim 1 is discussed in the specification, e.g., at page 18, line 25 to page 19, line 21. As noted therein, the disappearance of the interface means that, when the interface is observed by a transmission electron microscope (TEM), the interface cannot be ascertained

clearly. Each of independent Claims 5 and 11 contains, *inter alia*, a recitation similar or identical to the above-noted recitation of Claim 1.

*Izuha et al.* relates to a thin film dielectric device. *Izuha et al.* shows a lattice-aligned interface, and Fig. 4B of that document shows a TEM image thereof. In particular, it is noted that Fig. 4B shows a line, representing an interface, between the electrode and dielectric thin film shown in Fig. 4A. In addition, according to *Izuha et al.*, the thin films are formed by sputtering. Accordingly, an interface should exist between them. Applicants submit that nothing in *Izuha et al.* would teach or suggest at least that an interface between a lower electrode and/or an upper electrode and a piezoelectric film does not exist.

*Suzuki et al.* relates to a dielectric thin film and method for making the same. *Suzuki et al.* shows a stacked-layer arrangement having an inserted layer for forming a lattice distortion. However, Applicants submit that nothing in *Suzuki et al.* would teach or suggest at least that an interface between a lower electrode and/or an upper electrode and a piezoelectric film does not exist.

*Murai* relates to a piezoelectric device and ink-jet printing head. The Office Action is understood to concede that *Murai* does not teach or suggest that an interface between a lower electrode and/or an upper electrode and a piezoelectric film does not exist. Even if *Murai* be deemed to teach what the Office Action contends, Applicants submit that nothing in *Murai* would teach or suggest at least that an interface between a lower electrode and/or an upper electrode and a piezoelectric film does not exist.

Since none of the cited references, whether taken singly or in combination (even assuming, for the sake of argument, that such combination were permissible), contains all of

the elements of independent Claim 1, that claim is believed allowable over the cited art. Since each of independent Claims 5 and 11 recites a feature similar or identical to the above-discussed feature recited in Claim 1, Claims 5 and 11 are believed allowable for at least the same reasons.

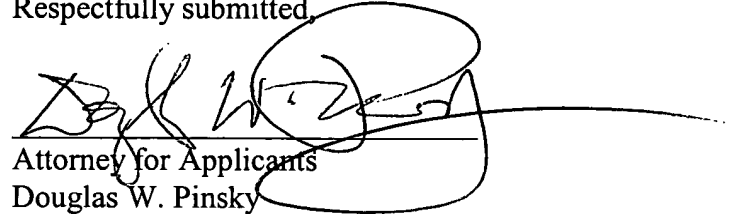
A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against independent Claims 1, 5 and 11. Those claims are therefore believed patentable over the art of record.

The other claims presented for examination are each dependent from independent Claim 1 and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. W. Pinsky', is written over a horizontal line. The signature is stylized and somewhat cursive.

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